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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,685	09/07/2000	Martin Pauly	99CR125/KE	2194

7590 04/02/2004  
Rockwell Collins Inc  
Intellectual Property Department  
400 Collins Road NE  
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Cedar Rapids, IA 52498

EXAMINER

NAHAR, QAMRUN

ART UNIT PAPER NUMBER

2124

17

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/656,685

Applicant(s)

PAULY, MARTIN

Examiner

Qamrun Nahar

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,7,9,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7,9,14 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in response to the RCE filed on 1/23/04.
2. The rejection under 35 U.S.C. 102(b) as being anticipated by Marmelstein (U.S. 5,187,788) to claims 1-3, 7, 9 and 14-15 is withdrawn in view of applicant's amendments.
3. The rejection under 35 U.S.C. 103(a) as being unpatentable over Marmelstein (U.S. 5,187,788) in view of Magor (U.S. 5,541,863) to claim 6 is withdrawn in view of applicant's amendments.
4. Claims 1, 2, 3, 7 and 14 have been amended.
5. Claims 1-3, 6-7, 9 and 14-15 are pending.
6. Claims 2-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.
7. Claims 2-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.
8. Claims 1-3, 6-7, 9 and 14-15 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling.
9. Claims 1-3, 6-7, 9 and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Remarks***

10. On March 30, 2004, the Examiner called Nathan O. Jensen, Reg. No. 41,460, proposing Formal Examiner's Amendment. However, he had requested the Examiner to send an office action for further consideration.

***Drawings***

11. Applicant is reminded that in order to avoid an abandonment of this application, the drawings must be corrected in accordance with the instructions set forth in the Notice of Draftsperson's Patent Drawing Review (PTO-948), attached to Paper No. 8, mailed on 3/14/03.

***Response to Amendment***

***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 2-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 2 recites the limitation, "the third state being ordered with respect to the first state and the second state", on lines 3-4 of the claim. The third state is a superstate. The parallel

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states are ordered with respect to each other in order to ensure deterministic behavior. Therefore, since the third state is a superstate, the third state is *not* ordered with respect to the parallel states; instead the fourth state, which is a parallel state with respect to the first state and the second state, should be ordered with respect to the parallel states, see specification, pg. 8, par. 5 and par.

6. Therefore, this limitation is interpreted as the fourth state being ordered with respect to the first state and the second state.

Claim 3 recites the limitation, "the fourth state being ordered with respect to the first state and the second state and the third state", on lines 3-4 of the claim. The rationale provided for claim 2 above also applies to claim 3. That is, the third state is a superstate and the fourth state is interpreted as being ordered with respect to the first state and the second state. Therefore, this limitation is interpreted as the fifth state being ordered with respect to the first state, the second state and the fourth state.

14. Claims 2-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 2 recites the limitation, "the third state being ordered with respect to the first state and the second state", on lines 3-4 of the claim. The specification does not provide support for the superstate being ordered with respect to the parallel states. That is, the third state is a superstate. The parallel states are ordered with respect to each other in order to ensure deterministic behavior. Therefore, since the third state is a superstate, the third state is *not*

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ordered with respect to the parallel states; instead the fourth state, which is a parallel state with respect to the first state and the second state, should be ordered with respect to the parallel states, see specification, pg. 8, par. 5 and par. 6. Therefore, this limitation is interpreted as the fourth state being ordered with respect to the first state and the second state.

Claim 3 recites the limitation, "the fourth state being ordered with respect to the first state and the second state and the third state", on lines 3-4 of the claim. The rationale provided for claim 2 above also applies to claim 3. That is, the third state is a superstate and the fourth state is interpreted as being ordered with respect to the first state and the second state. Therefore, this limitation is interpreted as the fifth state being ordered with respect to the first state, the second state and the fourth state.

15. Claims 1-3, 6-7, 9 and 14-15 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Parallel states are simultaneously active *when the superstate is active*, which is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Claim 1 recites the limitation, "a third state, the third state including the first state and the second state, the first state being parallel to and simultaneously active with the second state", on lines 6-7 of the claim. This limitation omits matter disclosed to be essential to the invention as described in the specification. That is, claim 1 omits the essential matter that the third state including the first state and the second state, the first state being parallel to and simultaneously active with the second state, *when the third state is active*. The specification described this

essential matter as necessary to practice the invention on page 8, par. 5, lines 5-7. Therefore, this limitation is interpreted as a third state, the third state including the first state and the second state, the first state being parallel to and simultaneously active with the second state, when the third state is active. If the applicant asserts that this matter is not essential to practice the invention, then the applicant is requested to specifically point out in the specification how the invention can be practiced without the third state (superstate) being active.

Claim 7 recites the limitation, "the group of states including a first state including a plurality of ordered parallel, simultaneously active states", on lines 4-5 of the claim. The rational provided for claim 1 above also applies to claim 7. Therefore, this limitation is interpreted as the group of states including a first state including a plurality of ordered parallel, simultaneously active states, when the first state is active.

Claim 14 recites the limitation, "providing a graphical representation of a state including a plurality of parallel states, the parallel states being simultaneously active and ordered with respect to each other", on lines 3-4 of the claim. The rational provided for claim 1 above also applies to claim 14. Therefore, this limitation is interpreted as providing a graphical representation of a state including a plurality of parallel states, the parallel states being simultaneously active when the state is active and ordered with respect to each other.

Claims 2-3 and 6 are rejected for dependency upon rejected base claim 1 above.

Claim 9 is rejected for dependency upon rejected base claim 7 above.

Claim 15 is rejected for dependency upon rejected base claim 14 above.

16. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

17. Claims 1-3, 6-7, 9 and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

18. Claim 1 fails to point out and distinctly claim the invention. Claim 1 recites the limitation, "a third state, the third state including the first state and the second state, the first state being parallel to and simultaneously active with the second state", on lines 6-7 of the claim. This limitation omits matter disclosed to be essential to the invention as described in the specification. That is, claim 1 omits the essential matter that the third state including the first state and the second state, the first state being parallel to and simultaneously active with the second state, *when the third state is active*. The specification described this essential matter as necessary to practice the invention on page 8, par. 5, lines 5-7. Therefore, this limitation is interpreted as a third state, the third state including the first state and the second state, the first state being parallel to and simultaneously active with the second state, when the third state is active. If the applicant asserts that this matter is not essential to practice the invention, then the applicant is requested to specifically point out in the specification how the invention can be practiced without the third state (superstate) being active. See *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); *In re Collier*, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968).

Claim 7 fails to point out and distinctly claim the invention. Claim 7 recites the limitation, "the group of states including a first state including a plurality of ordered parallel, simultaneously active states", on lines 4-5 of the claim. The rationale provided for claim 1 above



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also applies to claim 7. Therefore, this limitation is interpreted as the group of states including a first state including a plurality of ordered parallel, simultaneously active states, when the first state is active.

Claim 14 fails to point out and distinctly claim the invention. Claim 14 recites the limitation, "providing a graphical representation of a state including a plurality of parallel states, the parallel states being simultaneously active and ordered with respect to each other", on lines 3-4 of the claim. The rationale provided for claim 1 above also applies to claim 14. Therefore, this limitation is interpreted as providing a graphical representation of a state including a plurality of parallel states, the parallel states being simultaneously active when the state is active and ordered with respect to each other.

Claims 2-3 and 6 are rejected for dependency upon rejected base claim 1 above.

Claim 9 is rejected for dependency upon rejected base claim 7 above.

Claim 15 is rejected for dependency upon rejected base claim 14 above.

19. Claim 14 recites the limitation, "providing a graphical representation of a state including a plurality of parallel states, the parallel states being simultaneously active and ordered with respect to each other, the parallel states being ordered so that only one of the parallel, simultaneously active states is active in response to a particular event", on lines 3-6 of the claim. This limitation is indefinite because if the parallel states are simultaneously active and ordered with respect to each other, then how could the parallel states be ordered so that *only one* of the parallel, simultaneously active states is active, which is a direct contradiction. This limitation is interpreted as providing a graphical representation of a state including a plurality of parallel

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states, the parallel states being simultaneously active when the state is active and ordered with respect to each other, the parallel states being ordered so that only one of plurality of substate states of the parallel simultaneously active states is active in response to a particular event (see specification, pg. 8, par. 2).

Claim 15 is rejected for dependency upon rejected base claim 14 above.

20. Claim 2 recites the limitation, "the third state being ordered with respect to the first state and the second state", on lines 3-4 of the claim. This is indefinite because the specification does not provide support for the superstate being ordered with respect to the parallel states. That is, the third state is a superstate. The parallel states are ordered with respect to each other in order to ensure deterministic behavior. Therefore, since the third state is a superstate, the third state is *not* ordered with respect to the parallel states; instead the fourth state, which is a parallel state with respect to the first state and the second state, should be ordered with respect to the parallel states, see specification, pg. 8, par. 5 and par. 6. Therefore, this limitation is interpreted as the fourth state being ordered with respect to the first state and the second state.

Claim 3 recites the limitation, "the fourth state being ordered with respect to the first state and the second state and the third state", on lines 3-4 of the claim. The rationale provided for claim 2 above also applies to claim 3. That is, the third state is a superstate and the fourth state is interpreted as being ordered with respect to the first state and the second state. Therefore, this limitation is interpreted as the fifth state being ordered with respect to the first state, the second state and the fourth state.

***Allowable Subject Matter***

21. Claims 1-3, 6-7, 9 and 14-15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first paragraph and second paragraph, set forth in this Office action.

***Conclusion***


22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

23. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (703) 305-7699. The examiner can normally be reached on Mondays through Thursdays from 9:00 AM to 6:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone number for the organization where this application or processing is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

QN  
March 31, 2004



**TODD INGBERG  
PRIMARY EXAMINER**